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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/171,018	10/07/1998	JOSEPH B VOLPE	6178-9	7540

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EXAMINER

YE, LIN

ART UNIT PAPER NUMBER

2612

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/171,018

Applicant(s)

VOLPE, JOSEPH B

Examiner

Lin Ye

Art Unit

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al. U.S. Patent 3,798,796 in view of McClenahan et al. U.S. Reg. Number H1, 891.

Referring to claims 1 and 5, Stauff reference discloses a television camera (4) is removably attached to the optical instrument (2) which having at least one optical viewing path (See Col. 2, lines 63-68 and Col 3, lines 1-13). The video processor unit-(5) is for generating real time video signals from the camera 4 in optical viewing path (See Col.3 lines 24-26). A radio link transmits video signal to a remote receiving station (9). This display monitor allows one or more instructors or trainees (10, 11) to view from a distance, under good conditions, what trainee operator 1 sees.

It is well known to transmit different signals with differing frequencies. Although Stauff discloses the output of a single trainee being displayed on the monitor, it would have been obvious to have more than one trainee operating the optical device at a single time. This would allow each trainee has more training time (by not having to wait for his/her "turn") as well as giving instructors the flexibility to compare the trainee's "side-by-side". There fore,

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it would have been obvious to have more than one optical viewing device in the field at one time, wherein the output signals are distinguishable from each other- by frequency, for example.

Stauff reference does not have detail for optical instruments which attached a beam splitter.

McClenahan reference discloses in Figures 1 and 2, an optical system (10) for displaying a recording the same image of a target (12) as viewed by a shooter (14) through a rifle sight (16). The optical system (10) includes an optical beam splitter (20) having a first split beam path continuing at least one optical viewing path and enabling optical viewing and a second split beam path; and a color video camera 24 inside a waterproof housing (26). Housing (26) attaches to rifle sight (16) (See Col 3. lines 1-5).

This would be an advantage over Stauff's image system in that could quickly and easily redirect image signal to a video camera and makes a more compact and better balances training aid for remote instructors. For that reason, it would have been obvious to one of ordinary skill in the art at the time to see the optical instrument device attached with a beam splitter for redirecting image signal to the video camera disclosed by Stauff.

Referring to claims 2 and 3, McClenahan imaging system comprising an eyepiece (14) termination at least one of at least one optical viewing paths, said beam splitter (20) being aligned with said eyepiece as shown in Figure 1. The beam splitters and respective video imaging devices are formed as part of an integral unit, said integral unit having means for removable attachment to respective at least one eyepiece (See Col. 3, lines 28-39).

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Referring to claims 8-10, McClenahan imaging system includes monocular telescopic rifle sight (16) attached with video camera (24). It would have been obvious to incorporate such a design in binocular or periscope. Official Notice is taken that both these are often used in military applications.

Referring to claim 11, McClenahan's viewing devices comprises multiple mirrors (22 and 20) (See Col. 3, lines 20-26)

Referring to claim 12, Stauff's imaging system respective video processors and transmitters are formed as part of an integral unit (5) in the Figure. (See Col. 3, lines 24-27).

Referring to claims 13-15, McClenahan's imaging system comprises a viewing screen terminating at least one of at least one optical viewing path (18). The viewing screen has a viewing surface on which beam splitter is substantially centrally disposed. The beam splitter (20) is adhesively bonded to viewing surface of housing (26). The camera comprises an objective lens for focusing images from beam splitter propagated along second split beam path (See Col 3. lines 9-22).

3. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al. U.S. Patent 3,798,796 in view of McClenahan et al. U.S Reg. Number H1, 891 and Rod U.S. Patent 5,924,868.

Stauff reference discloses a television camera (4) is removably attached to the optical instrument (2) which having at least one optical viewing path (See Col. 2, lines 63-68 and Col 3, lines 1-13). The video processor unit (5) is for generating real time video signals from the camera 4 in optical viewing path (See Col.3 lines 24-26). A radio link transmits video

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signal to a remote receiving station (9). This display monitor allows one or more instructors or trainees (10, 11) to view from a distance, under good conditions, what trainee operator 1 sees.

It is well known to transmit different signals with differing frequencies. Although Stauff discloses the output of a single trainee being displayed on the monitor, it would have been obvious to have more than one trainee operating the optical device at a single time. This would allow each trainee has more training time (by not having to wait for his/her "turn") as well as giving instructors the flexibility to compare the trainee's "side-by-side". There fore, it would have been obvious to have more than one optical viewing device in the field at one time, wherein the output signals are distinguishable from each other- by frequency, for example.

McClenahan reference discloses in Figures 1 and 2, an optical system (10) for displaying a recording the same image of a target (12) as viewed by a shooter (14) through a rifle sight (16). The optical system (10) includes an optical beam splitter (20) having a first split beam path continuing at least one optical viewing path and enabling optical viewing and a second split beam path; and a color video camera 24 inside a waterproof housing (26). Hosing (26) attaches to rifle sight (16) (See Col 3. lines 1-5).

Referring to claims 4 and 6, Stauff reference does not teach video signals are distinguishable from one another by data in an on screen display.

Rod reference discloses in Figure 3, the system includes cameras and display eyewear and display monitors for use by the shooter and/or the instructor. A head mounted camera (72) provides a video signal (74) to camera controller (76) and forward to split screen

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processor (80). A camera (82) provides a video signal to split screen processor (80). The video monitor can display each of the image signals simultaneously.

This would be an advantage over Stauff's image system in that the instructors could quickly and easily monitor the operators in one screen. For that reason, it would have been obvious to one of ordinary skill in the art at the time to see video signals are distinguishable from one another by data in an on screen display disclosed by Stauff.

4. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al. U.S. Patent 3,798,796 in view of McClenahan et al. U.S. Reg. Number H1, 891, Rod U.S. Patent 5,924,868 and Jenkins et al. U.S. Patent 5,644,386.

Stauff reference discloses a television camera (4) is removably attached to the optical instrument (2) which having at least one optical viewing path (See Col. 2, lines 63-68 and Col 3, lines 1-13). The video processor unit (5) is for generating real time video signals from the camera 4 in optical viewing path (See Col.3 lines 24-26). A radio link transmits video signal to a remote receiving station (9). This display monitor allows one or more instructors or trainees (10, 11) to view from a distance, under good conditions, what trainee operator 1 sees.

It is well known to transmit different signals with differing frequencies. Although Stauff discloses the output of a single trainee being displayed on the monitor, it would have been obvious to have more than one trainee operating the optical device at a single time. This would allow each trainee has more training time (by not having to wait for his/her "turn") as well as giving instructors the flexibility to compare the trainee's "side-by-side". There fore,

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it would have been obvious to have more than one optical viewing device in the field at one time, wherein the output signals are distinguishable from each other- by frequency, for example.

McClenahan reference discloses in Figures 1 and 2, an optical system (10) for displaying a recording the same image of a target (12) as viewed by a shooter (14) through a rifle sight (16). The optical system (10) includes an optical beam splitter (20) having a first split beam path continuing at least one optical viewing path and enabling optical viewing and a second split beam path; and a color video camera 24 inside a waterproof housing (26). Housing (26) attaches to rifle sight (16) (See Col 3. lines 1-5).

Referring to claims 7 and 16, Stauff reference does not mention the wireless transmission comprises a satellite link instead of radio link and the data represents information from a global positions sensor.

Jenkins reference discloses in Figure 1, a system (10) shown for producing, processing, displaying, and transmitting images of one or more targets in a target scene 12. A Global Positioning System (GPS) transmitter (18) transmits a signal fro providing accurate position data for the vehicle (14). The processing center (17) manipulates the resulting data into packets of information and transmits these packets of information by a limited bandwidth communications link (20) to a remote site (22) for display on a display (24) (See Col. 3, lines 49-68).

This would be an advantage over Stauff's image system in that the remote viewer can communicate with the operators without the distance limitation and provide high quality imaging digital data and accurate target position data in real time. For that reason, it would

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have been obvious to one of ordinary skill in the art at the time to see wireless transmission comprises a satellite link disclosed by Stauff.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lin Ye** whose telephone number is **(703) 305-3250**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to:

(703) 872-9314

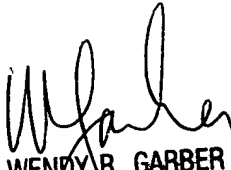
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Lin Ye

June 3, 2002


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600